

**Work Order ID 128139**

Thursday, January 08, 2015 9:09:53 AM

**\*128139\***

Page 1

Item ID: D350-636-015

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Run Start

**\*NR1\***Approvals: Process Plan: MLSDate: 15-01-08

Tooling:

Date:

Stop

**\*NR2\***

QC:

Date:

SPC (Y/N):

Date:

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

|           |   |
|-----------|---|
| D4168-041 | B |
|-----------|---|

100

Document Control

0.00

**\*100\***

DC

DOCUMENT CONTROL

Memo

record fwd angle:

87.4°DGL

0.00

Doc.Control -USB or Paperwork

Photocopy blue file and type labels per PPP D350-636-015 CHG 005

MLS1502-02

(1X)

DAS  
**46**  
9-89

FEB 02 2015

**Work Order ID 128139****\*128139\***

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Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start **\*NR1\***

QC: Date: SPC (Y/N): Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

110

**\*110\***

Skidtubes

Skidtubes

Memo

0.00

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side.

\*\*\*ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE\*\*\*

Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill Jig DT8150 &amp; DT8863A for first side only DT8863B for second side (detail B)

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting, section H-H. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE.

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168, detail A

6- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.

7- Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total of 1 hole per side)

8- Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left

DGL 15-1-8

DGL 15-1-8

BE15-01-72

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Item ID: D350-636-015

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Stop **\*NS2\***Start Date: 1/8/2015 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start **\*NR1\***

QC: Date: SPC (Y/N): Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

from bending as per QSI 004

A/R Aluminum Rod batch: *M130812*

9- Grind welds flush as per Dwg D4168

*7 BE15-01-12*

120 QC10- Inspect visual per QSI004- ground welds 0.00

**\*120\***

QC

Memo 0.00

Quality Control

DAS  
38  
9-89

JAN 12 2015

130 QC5- Inspect part completeness to step on W/O 0.00

**\*130\***

QC

Memo 0.00

Quality Control

DAS  
38  
9-89

JAN 12 2015

# Work Order ID 128139

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Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015

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\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

\*NR1\*

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

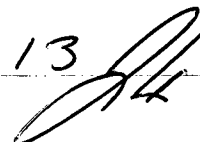
\*140\*

HandFinish

Memo

0.00

Hand Finishing

15-1-13 

150

QC7-Inspect Chemical Conversion Coat

0.00

\*150\*

QC

Memo

0.00

Quality Control

15-1-15 

# Work Order ID 128139

\*128139\*

Page 5

Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start \*NR1\*

QC: Date: SPC (Y/N): Date:

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                                                                                                                                       | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160                            | Skidtubes                                                                                                                                                      | 0.00                 |         |        |              |               |               |                  |                |
| *160*                          |                                                                                                                                                                |                      |         |        |              |               |               |                  |                |
| Skidtubes                      | Memo                                                                                                                                                           | 0.00                 |         |        |              |               |               |                  |                |
| Skidtubes                      | 1-Open up holes using hole saw of Detail C and ground handling section AL-AL to 0.625" (total of 8 holes per side) as per dwg D4168.                           |                      |         |        |              |               |               |                  |                |
|                                | 2-Open up holes using hole saw of Detail B to 0.750" (total of 4 holes per side) as per dwg D4168.                                                             |                      |         |        |              |               |               |                  |                |
|                                | 3- Open float hole to 0.500" using uni-bit (4 per side) section AJ-AJ                                                                                          |                      |         |        |              |               |               |                  |                |
|                                | Open wearplate holes to size as per dwg (4 holes per sides), section CG-CG                                                                                     |                      |         |        |              |               |               |                  |                |
|                                | 4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes section AJ-AJ per dwg D4168 (welding instructions on sheet 8)                    |                      |         |        |              |               |               |                  |                |
|                                | 5-Deburr and blow out all chips from inside of tube                                                                                                            |                      |         |        |              |               |               |                  |                |
|                                | 6- Prepare tube for welding, remove alodine as required.                                                                                                       |                      |         |        |              |               |               |                  |                |
|                                | 7-Bond web D2739 in place as per QSI 015, let cure for 12hrs.<br>A/R Sikaflex-291 batch: <u>131120</u><br>exp. date: <u>15-10-21</u>                           |                      |         |        |              |               |               |                  |                |
|                                | 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QSI004<br>(welding instructions on sheet 8)<br>A/R Aluminum Rod batch: <u>MB0812</u> |                      |         |        |              |               |               |                  |                |
|                                | 9- At section AJ-AJ drill out x-bolt spacer to 0.404"                                                                                                          |                      |         |        |              |               |               |                  |                |

DGL 15-1-15

DGL/gu 15-1-15

BE15-0119

# Work Order ID 128139

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Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID:  
 Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Stop \*NS2\*

Start Date: 1/8/2015 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 1/8/2015 Req'd Qty: 1.00 \*1\* Customer:

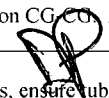
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

10-Grind welds flush as per Dwg D4168

11-Spot face ground handling holes section (total of 4 places per side) as per  
 dwg D4168, section AL-AL

12- C'bore section CG, CO, ADJUST TOOLING AS REQUIRED.  
 VERF BY: 

13- Deburr holes, ensure tube is free of all scratches before sending to  
 paint.

\*\*\*\*\* FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING  
 HOLE IN TUBE \*\*\*\*\*  
 \*\*\*\*\*REF TO W/O BATCH: N/A \*\*\*\*\*

170

\*170\*

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds 0.00

Memo 0.00

DAS  
 3-28  
 9-88

JAN 22 2015

DQA:

Date: 15/03/26QA Closed: 15/03/26Date: 15/03/26

## WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

|                                                                                    |                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                               |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: <u>128139</u><br>Part No. <u>D350-636015</u><br>NCR No. <u>15-4723</u> | <b>DISPOSITION</b><br>Rework <input checked="" type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><table border="0"> <tr> <td>Skid-tube <input checked="" type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input checked="" type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input checked="" type="checkbox"/>                                      | Crosstube <input type="checkbox"/>                                                                                                                                                        | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Engineering <input type="checkbox"/>          |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                                                 | Small Fab <input type="checkbox"/>                                                                                                                                                        | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Quality <input type="checkbox"/>              |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                                             | Finishing <input type="checkbox"/>                                                                                                                                                        | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Other <input type="checkbox"/>                |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                                                 | Composite <input type="checkbox"/>                                                                                                                                                        | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                               |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    |   | Date     | Step | Qty | Description of work order update or non-conformance                              | Initial Chief Eng                | Action Description                                                                                                            | Sign & Date    | Verification                                                                                   | QC Inspector      |
|---------------|---|----------|------|-----|----------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------|-------------------|
| Design        |   | 15-01-21 | 160  | 1   | OVALIZED CROSSBOLT SPACER WHILE C'BORF 1ST HOLE FROM AET.<br><br>RL Poor tooling | DAS<br>12<br>9-89<br><br>15/1/21 | Acceptable to<br><br>Remove xbolt spacer and <del>now</del> re-install<br><br>D4170-1 <u>B107896</u><br>x1<br><br>AIR M130137 | BE<br>15-01-21 | <br>15-1-21 | 5<br><br>15/01/21 |
| Doc/Data      |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Equip/Tooling | 4 |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Handling/Pre  |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Material      |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Operator      |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Offset/Setup  |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Process       | 4 |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Supplier      |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Training      |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Transport     |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |
| Unapproved    |   |          |      |     |                                                                                  |                                  |                                                                                                                               |                |                                                                                                |                   |

## FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><input checked="" type="checkbox"/> Other | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Poor tooling to Pullen operator.

|                                                                                                                                                   |                       |                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|--|
| <b>DART AEROSPACE LTD</b>                                                                                                                         |                       | <b>Work Order:</b> |  |
| <b>Description:</b> Repair Scheme D119-646-241 Skid tubes<br>FWD GHW holes do not align NCR 14-3771<br>For tubes in production and Returned tubes |                       |                    |  |
| <b>Drawing:</b> D3887                                                                                                                             | <b>Repair Scheme:</b> | <b>RS1015</b>      |  |
| <b>Part No:</b> D119-646-241                                                                                                                      | <b>Page:</b>          | <b>1 of 1</b>      |  |
| <b>Batch No:</b>                                                                                                                                  | <b>Qty:</b>           | <b>1</b>           |  |

| Step | Location  | Procedure                                                                                                         | By | Date | Qty |
|------|-----------|-------------------------------------------------------------------------------------------------------------------|----|------|-----|
| 1    | Finishing | Remove FWD & AFT caps D2855-3.<br>Clean all sikaflex off cap & identify per each tube caps was removed (P/N & B#) |    |      |     |
| 2    | Skidtube  | Drill out & remove FWD Cross bolt spacers D2579 in Detail C on Dwg D3887                                          |    |      |     |
| 3    | Skidtube  | Reposition location of holes as per Drawing but using <u><b>+/-0.005" tol</b></u> and per symmetrical in QSI 018  |    |      |     |
| 4    | Skidtube  | TACK ONLY Cross bolt spacers D2579 B _____                                                                        |    |      |     |
| 5    | QC        | Location MUST be verified by QC<br>Record Dims HERE                                                               |    |      |     |
| 6    | Skidtube  | Weld as per QSI 004 A/R _____<br>Back Drill<br>Grind welds flush & deburr                                         |    |      |     |
| 7    | QC        | QC 10 & 5 Inspection<br><b>***TEST FIT GHW WHEELS***</b><br><b>Pass</b> <input type="checkbox"/>                  |    |      |     |
| 8    | Finishing | Touch up alodine as per QSI 005                                                                                   |    |      |     |
| 9    | Finishing | Touch up Powder coat per QSI 005                                                                                  |    |      |     |
| 10   | Finishing | Re-assemble original caps back on tubes<br>Sikaflex B _____ exp _____                                             |    |      |     |
| 11   | QC        | QC 3 inspect                                                                                                      |    |      |     |
| 12   | QC        | QC 5 inspect                                                                                                      |    |      |     |
| 13   | QC        | QC21                                                                                                              |    |      |     |

| Rev | Date     | Change Description | Prepared | Checked | Approved |
|-----|----------|--------------------|----------|---------|----------|
| A   | 14.04.29 | New Issue          | ED       |         |          |



# Work Order ID 128139

\*128139\*

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Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: QC: Date: SPC (Y/N): Date:

Run Start \*NR1\*

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                      | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp    |
|--------------------------------|-----------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|-------------------|
| 180                            | QC5- Inspect part completeness to step on W/O | 0.00                 |         |        |              |               |               |                  | JAS<br>38<br>9-89 |
| *180*                          |                                               |                      |         |        |              |               |               |                  |                   |
| QC                             | Memo                                          | 0.00                 |         |        |              |               |               |                  |                   |

Quality Control

\*\*\*VERIFY C'BOARD IS GOOD\*\*\*

JAN 22 2015

190 Pressure Wash per QSI005 4.3 0.00

\*190\* HandFinish 0.00

Hand Finishing Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1 15-1-27 RGL

200 0.00

\*200\* SprayPaint 0.00

Spray Painting Memo

1- PRIME AS PER DWG AND QSI 005 4.2  
PRIMER PRC DESOTO 515X349 BATCH: 128975

2- PAINT WHITE AS PER DWG AND QSI 005 4.2  
PAINT BATCH: 131122

DAS  
41  
9-89

15-1-29

# Work Order ID 128139

\*128139\*

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Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 1/8/2015 Req'd Qty: 1.00 \*1\* Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                                                                   | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------------------------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 210                            | QC14- Inspect Spray Paint                                                                  | 0.00                 |         |        |              |               |               |                  |                |
| *210*                          |                                                                                            |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                                                       | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | Inspect for foreign object per QSI 024                                                     |                      |         |        |              |               |               |                  |                |
| 230                            |                                                                                            | 0.00                 |         |        |              |               |               |                  |                |
| *230*                          | HandFinishing                                                                              |                      |         |        |              |               |               |                  |                |
| HandFinish                     | Memo                                                                                       | 0.00                 |         |        |              |               |               |                  |                |
| Hand Finishing                 | 1- Install inserts as per Dwg D4168                                                        |                      |         |        |              |               |               |                  |                |
|                                | 2-Inspect for Foreign Objects                                                              |                      |         |        |              |               |               |                  |                |
|                                | 3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168 |                      |         |        |              |               |               |                  |                |
|                                | SIKA FLEX 241                                                                              |                      |         |        |              |               |               |                  |                |
|                                | BATCH: 14131126                                                                            |                      |         |        |              |               |               |                  |                |
|                                | EXP DATE: 5/08                                                                             |                      |         |        |              |               |               |                  |                |
|                                | 4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube                           |                      |         |        |              |               |               |                  |                |
|                                | A/R 55-o'ring lube batch: 14129305 RTU 598 B4K M125792 exp 5/08                            |                      |         |        |              |               |               |                  |                |
|                                | 5-Coat all exposed fasteners with "LPS Procyon" batch: 14122900                            |                      |         |        |              |               |               |                  |                |

DAS  
15  
9-89

# Work Order ID 128139

\*128139\*

Page 9

Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 1/8/2015

Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID  
240

Operation

Description  
QC5- Inspect part completeness to step on W/O

Set Up/  
Run Hours  
0.00

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

\*240\*

QC

Memo

0.00

Quality Control

DAS  
38

IAN 30 2015

250

Pick Kit

0.00

\*250\*

Packaging

Memo

0.00

Packaging

If making a D350-636-215  
pick kit will only requires:  
1 X AN3C37A  
1 X AN3C34A  
1 X AN3C42A  
2 X D3493-1

1 Sm  
FEB 01 2015

DAS  
46  
9-89

260

QC4- 100% Inspect kits for completeness

0.00

\*260\*

QC

Memo

0.00

Quality Control

\*\*\*\*\*ensure antiseize is on AN8C21A bolts\*\*\*\*\*

(1x)

DAS  
46  
9-89

FEB 02 2015

IAN 02 2015

# Work Order ID 128139

\*128139\*

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Thursday, January 08, 2015 9:09:53 AM

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/8/2015 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Run Start \*NR1\*

Approvals: Process Plan: Date: Tooling: Date:

Stop \*NR2\*

QC: Date: SPC (Y/N): Date:

| Sequence ID/<br>Work Center ID | Operation<br>Description                              | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|-------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 270                            | Packaging                                             | 0.00                 |         |        |              |               |               |                  |                |
| *270*                          |                                                       |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                                  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Identify and pack for shipping as per PPPD350-636-015 |                      |         |        |              |               |               |                  |                |
|                                | Location: _____                                       |                      |         |        |              |               |               |                  |                |
|                                | PPP rev: _____                                        |                      |         |        |              |               |               |                  |                |
| 280                            | QC21- Final Inspection - Work Order Release           | 0.00                 |         |        |              |               |               |                  |                |
| *280*                          |                                                       |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                       |                      |         |        |              |               |               |                  |                |

JAN 02 2015

MLJ 15-02-02

MS-2

# Picklist Print

Thursday, January 08, 2015 9:10:00 AM

Page 1

12

Work Order ID: 128139

\*128139\*

Parent Item: D350-636-015

\*D350-636-015\*

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC IPP Rev:B  
11.04.14 ecn11-553 DD verf:EC IPP Rev:C 11.10.18 as per  
NCR 11-906 DD verf:EC IPP Rev:D 112.04.16 AS PER ECN 12-  
542 DD verf:EC IPP REV:E 13.08.28 PER ECN13-594 DD  
VERF:JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| AN3C34A                         |                        | Purchased     | No          |                     |                  | 230             | Each               | 13.0000        | 1           | 1            |               |                |        |

\*AN3C34A\*

BOLT

\*\*

15/01/30

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST347    | 13      |          |
| m127044  | 13      |          |

AN3C36A

Purchased No

230 Each 145.0000 4

\*AN3C36A\*

Bolt

\*\*

15/01/30

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FG       | 24      |          |
| 101261   | 4       |          |
| 116590   | 10      |          |
| 122204   | 10      |          |
| FP001    | 27      |          |
| m129907  | 27      |          |
| ST338a   | 50      |          |
| m130874  | 50      |          |
| ST348    | 44      |          |
| m129907  | 44      |          |

V-L

# Picklist Print

Thursday, January 08, 2015 9:10:00 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

|                  |              |    |     |      |          |   |   |                 |                    |
|------------------|--------------|----|-----|------|----------|---|---|-----------------|--------------------|
| D3492-1          | Manufactured | No | 230 | Each | 173.0000 | 8 | 8 | Start Qty: 1.00 | Required Qty: 1.00 |
| <b>*D3492-1*</b> |              |    |     |      |          |   |   | **              | lll 15/01/13       |
| Plug             |              |    |     |      |          |   |   |                 |                    |

|                  |              |    |     |      | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |     |              |
|------------------|--------------|----|-----|------|-----------------|----------------|-----------------|-----|--------------|
|                  |              |    |     |      | FP001           | 173            |                 |     |              |
|                  |              |    |     |      | 125904          | 173            |                 | x 8 |              |
| D3492-3          | Manufactured | No | 230 | Each |                 |                | 194.0000        | 8   | 8            |
| <b>*D3492-3*</b> |              |    |     |      |                 |                |                 | **  | lll 15/01/13 |
| Plug             |              |    |     |      |                 |                |                 |     |              |

|                  |              |    |     |      | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |     |              |
|------------------|--------------|----|-----|------|-----------------|----------------|-----------------|-----|--------------|
|                  |              |    |     |      | FP001           | 194            |                 |     |              |
|                  |              |    |     |      | 125905          | 194            |                 | x 8 |              |
| D3873-1          | Manufactured | No | 230 | Each |                 |                | 91.0000         | 7   | 7            |
| <b>*D3873-1*</b> |              |    |     |      |                 |                |                 | **  | lll 15/01/13 |
| Bushing          |              |    |     |      |                 |                |                 |     |              |

|                    |              |    |     |      | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |     |              |
|--------------------|--------------|----|-----|------|-----------------|----------------|-----------------|-----|--------------|
|                    |              |    |     |      | FP001           | 42             |                 |     |              |
|                    |              |    |     |      | 124192          | 42             |                 |     |              |
|                    |              |    |     |      | ST063           | 49             |                 |     |              |
|                    |              |    |     |      | 126709          | 49             | 12              | x 7 |              |
| D4154-041          | Manufactured | No | 230 | Each |                 |                | 7.0000          | 1   | 1            |
| <b>*D4154-041*</b> |              |    |     |      |                 |                |                 | **  | lll 15/01/13 |
| Wearplate Assembly |              |    |     |      |                 |                |                 |     |              |

|  |  |  |  |  | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |     |  |
|--|--|--|--|--|-----------------|----------------|-----------------|-----|--|
|  |  |  |  |  | FP002           | 7              |                 |     |  |
|  |  |  |  |  | 120226          | 7              |                 | x 1 |  |

# Picklist Print

Thursday, January 08, 2015 9:10:00 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

D4170-1 Manufactured No 230 Each 166.0000 4 4

Start Qty: 1.00

Required Qty: 1.00

**\*D4170-1\***

Bushing

\*\*

*15-01-19*  
*DE 1430*

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| LG001    | 166     |          |
| 107896   | 89      |          |
| 119639   | 44      |          |
| 123940   | 33      |          |

*4 +1*

D4171-1 Manufactured No 230 Each 7.0000 1 1

**\*D4171-1\***

Bushing

\*\*

*15101130*

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST096    | 7       |          |
| 125038   | 7       |          |

*21*  
*5*

MS21043-3 Purchased No 230 Each 426.0000 5 5

**\*MS21043-3\***

Nut

\*\*

*15101130*

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FG       | 80      |          |
| 103691   | 80      |          |
| FP001    | 294     |          |
| m130673  | 294     |          |
| GA       | 52      |          |
| m130673  | 52      |          |

*45*

# Picklist Print

Thursday, January 08, 2015 9:10:00 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

NAS1149C0363R

Purchased

No

230

Each

Start Qty: 1.00  
962.0000 9 9

Required Qty: 1.00

**\*NAS1149C0363R\***

Washer

\*\*

*Handwritten signature and date 1/16/13*

Location

Loc Qty

Loc Code

FP001

221

114742

221

*X9*

GA

228

m130673

228

ST271

513

m130673

513

NAS1515H3L

Purchased

No

230

Each

687.0000 4 4

**\*NAS1515H3L \***

Washer

\*\*

*Handwritten signature and date 1/16/13*

Location

Loc Qty

Loc Code

FG

40

102472

40

FP001

91

m127831

91

ST266

556

m127831

56

m130726

500

*X4*

NAS1611-010

Purchased

No

230

Each

172.0000 8 8

**\*NAS1611-010\***

O-RING

\*\*

*Handwritten signature and date 1/16/13*

Location

Loc Qty

Loc Code

FP001

172

m130797

172

*X8*



# Picklist Print

Thursday, January 08, 2015 9:10:00 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

NAS1611-013 Purchased No 230 Each 942.0000 8 8

Start Qty: 1.00

Required Qty: 1.00

**\*NAS1611-013\***

O-RING

\*\*

15/6/130

## Location

## Loc Qty

## Loc Code

FP001

942

m130758

942

250

Each

170.0000

\*\*

V8

AN3C37A

Purchased

No

**DAS  
46  
9-89**

**\*AN3C37A\***

BOLT

## Location

## Loc Qty

## Loc Code

ST338a

170

M128773

80

M129650

90

250

Each

40.0000

\*\*

Smf  
FEB 01 2015

AN3C42A

Purchased

No

**DAS  
46  
9-89**

**\*AN3C42A\***

Bolt

## Location

## Loc Qty

## Loc Code

FG

5

121103

5

ST347

35

m130460

5

m130485

30

Sm  
FEB 01 2015

# Picklist Print

Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

NAS1149D0863J Purchased No 250 Each 758.0000 Start Qty: 1.00  
1 2 2

**\*NAS1149D0863.J\*** **DAS**  
Washer **46**  
9-89

\*\*

Required Qty: 1.00

FEB 01 2015

Location Loc Qty Loc Code

FP001 57  
125484 57  
ST260a 700  
125268 600  
125635 100  
st268 1  
125268 1

D2744 Manufactured No 110 Each 38.0000 1 1

**\*D2744\***  
Cap

\*\*

Location Loc Qty Loc Code

LG001 38  
125894 38

D2600-3-BENT-LH Manufactured No 110 Each 4.0000 1 1

**\*D2600-3-BENT-LH\***  
Extrusion Bent LH

\*\*

Location Loc Qty Loc Code

LG002 4  
125886 4

D2743 Manufactured No 160 Each 155.0000 8 8

**\*D2743\***  
Crossbolt Spacer

\*\*

Location Loc Qty Loc Code

LG001 155  
125893 8  
127636 147

# Picklist Print

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Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

D2739      Manufactured      No      160      Each      10.0000      1      1

Start Qty: 1.00

Required Qty: 1.00

**\*D2739\***

350 I Beam

\*\*

| Location            | Loc Qty | Loc Code |
|---------------------|---------|----------|
| LG003 <u>125858</u> | 10      |          |
| 125889              | 10      |          |

4

DGL 15-1-15

D3490-3      Manufactured      No

160      Each      107.0000      4      4

**\*D3490-3\***

Cross Bolt Spacer

\*\*

| Location            | Loc Qty | Loc Code |
|---------------------|---------|----------|
| LG001 <u>125903</u> | 107     |          |
|                     | 107     |          |

4

BE-15-01-19

D3490-1      Manufactured      No

160      Each      117.0000      4      4

**\*D3490-1\***

Cross Bolt Spacer

\*\*

| Location            | Loc Qty | Loc Code |
|---------------------|---------|----------|
| LG001 <u>125902</u> | 117     |          |
|                     | 117     |          |

4

BE-15-01-19

ALS4-1032-225      AELS8-1032-225 Purchased      No

230      Each      1,546.000      4      4

**\*AI S4-1032-225\***

Rivnut

\*\*

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FG       | 120     |          |
| M127028  | 120     |          |
| FP001    | 622     |          |
| M131067  | 622     |          |
| st549    | 804     |          |
| M131067  | 804     |          |

X4

1510130

Thursday, January 08, 2015 9:10:01 AM

Shop Packet Print

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# Picklist Print

Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

AN8C35A

Purchased

No

230

Each

25.0000

Start Qty: 1.00

Required Qty: 1.00

1 1

**\*AN8C35A\***

Bolt

\*\*

15/6/130

## Location

## Loc Qty

## Loc Code

FG

5

121275

5

FP001

20

m130114

1

m130784

19

D3488-041

Manufactured

No

230

Each

12.0000

1

1

**\*D3488-041\***

Blade Fitting LH

\*\*

15/6/138

## Location

## Loc Qty

## Loc Code

FP001

12

B125896

124200

1

125897

6

125898

5

AN6C44A

Purchased

No

230

Each

102.0000

4

4

**\*AN6C44A\***

Bolt

\*\*

15/6/138

## Location

## Loc Qty

## Loc Code

FG

2

103964

2

11131367

FP001

4

m130863

4

ST286A

17

m130863

17

ST332

11

m130863

11

ST333

68

m131151

68

Thursday, January 08, 2015 9:10:01 AM

Shop Packet Print

# Picklist Print

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Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

|                    |           |    |     |      |          |   |   |                 |                    |
|--------------------|-----------|----|-----|------|----------|---|---|-----------------|--------------------|
| MS21083C8          | Purchased | No | 230 | Each | 114.0000 | 1 | 1 | Start Qty: 1.00 | Required Qty: 1.00 |
| <b>*MS21083C8*</b> |           |    |     |      |          |   |   | **              | ell 15/01/30       |
| Nut                |           |    |     |      |          |   |   |                 |                    |

|                  |              |    | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |  |  |    |              |
|------------------|--------------|----|-----------------|----------------|-----------------|--|--|----|--------------|
| D3631-1          | Manufactured | No | ST300           | 114            |                 |  |  |    |              |
|                  |              |    | m131049         | 114            |                 |  |  |    |              |
| <b>*D3631-1*</b> |              |    |                 |                |                 |  |  | ** | ell 15/01/30 |
| Washer           |              |    |                 |                |                 |  |  |    |              |

|                        |           |    | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |  |  |    |              |
|------------------------|-----------|----|-----------------|----------------|-----------------|--|--|----|--------------|
| NAS1149C0332R          | Purchased | No | FP001           | 170            |                 |  |  |    |              |
|                        |           |    | 125912          | 170            |                 |  |  |    |              |
| <b>*NAS1149C0332R*</b> |           |    |                 |                |                 |  |  | ** | ell 15/01/30 |
| WASHER                 |           |    |                 |                |                 |  |  |    |              |

|                |              |    | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |  |  |    |              |
|----------------|--------------|----|-----------------|----------------|-----------------|--|--|----|--------------|
| D2745          | Manufactured | No | FP001           | 2581           |                 |  |  |    |              |
|                |              |    | m130325         | 2581           |                 |  |  |    |              |
|                |              |    | GA              | 126            |                 |  |  |    |              |
|                |              |    | 125654          | 126            |                 |  |  |    |              |
|                |              |    | ST271           | 1664           |                 |  |  |    |              |
|                |              |    | m130325         | 664            |                 |  |  |    |              |
|                |              |    | m130466         | 1000           |                 |  |  |    |              |
| <b>*D2745*</b> |              |    |                 |                |                 |  |  | ** | ell 15/01/30 |
| Bushing        |              |    |                 |                |                 |  |  |    |              |

|  |  |  | <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |  |  |  |  |
|--|--|--|-----------------|----------------|-----------------|--|--|--|--|
|  |  |  | ST010           | 76             |                 |  |  |  |  |
|  |  |  | 125895          | 76             |                 |  |  |  |  |
|  |  |  |                 |                |                 |  |  |  |  |

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Shop Packet Print

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# Picklist Print

Page 10

Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

NAS1149C0832R

Purchased

No

230

Each

189.0000

Start Qty: 1.00

Required Qty: 1.00

**\*NAS1149C0832R\***

Washer

\*\*

*Handwritten:* 1516130

Location

Loc Qty

Loc Code

FP001

45

m114915

45

*Handwritten:* X1

ST271

144

m125807

144

AN3C6A

Purchased

No

230

Each

608.0000

4

4

**\*AN3C6A\***

Bolt

\*\*

*Handwritten:* 1516130

Location

Loc Qty

Loc Code

CA

39

m128704

39

FG

10

122416

10

FP001

118

m128769

118

*Handwritten:* X4

ST338a

441

m128769

441

MS21043-6

Purchased

No

230

Each

206.0000

4

4

**\*MS21043-6\***

NUT

\*\*

*Handwritten:* 1516130

Location

Loc Qty

Loc Code

FG

20

103693

20

FP001

186

m130325

6

m130726

180

*Handwritten:* X4

Thursday, January 08, 2015 9:10:01 AM

Shop Packet Print

Page 10

# Picklist Print

Page 11

Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

D3493-1 Manufactured No 250 Each 109.0000 Start Qty: 1.00 2

**\*D3493-1\***  
Washer

**DAS**  
**46**  
9-89

\*\*

Required Qty: 1.00

*ShB*  
FEB 01 2015



Location Loc Qty Loc Code

FG 10

97201 10

ST046 99

125906 99

MS21083C8 Purchased No 250 Each 114.0000 2 2

**\*MS21083C8\***  
Nut

**DAS**  
**46**  
9-89

\*\*

*ShB*  
FEB 01 2015



Location Loc Qty Loc Code

ST300 114

m131049 114

AN8C21A Purchased No 250 Each 20.0000 2 2

**\*AN8C21A\***  
Bolt

**DAS**  
**46**  
9-89

\*\*

*ShB*  
FEB 01 2015



Location Loc Qty Loc Code

FG 2

123966 2

ST332 18

m131100 18

Thursday, January 08, 2015 9:10:01 AM

Shop Packet Print

Page 11

# Picklist Print

Page 12

Thursday, January 08, 2015 9:10:01 AM

Work Order ID: 128139

**\*128139\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube LH with Run-on Landing Wearplates, DART (Apical)  
Cylindrical/Aerazur Float Compatible

Start Date: 1/8/2015

Required Date: 1/8/2015

D2741

Manufactured No

250

Each

Start Qty: 1.00  
11.0000 1/ 1

Required Qty: 1.00

**\*D2741\***  
Replacement Blade

**DAS**  
**46**  
**9-89**

\*\*

*ShA*

FEB 01 2015

Location

Loc Qty

Loc Code

FG

10

100664

3

113640

2

115522

5

ST538

1

124047

1

*BDS*

*1*

Thursday, January 08, 2015 9:10:01 AM

Shop Packet Print

Page 12

**DAS**  
**46**  
**9-89**



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| QTY<br>-041 | QTY<br>-042 | QTY<br>-043 | QTY<br>-044 | PART NUMBER   | DESCRIPTION               |
|-------------|-------------|-------------|-------------|---------------|---------------------------|
| X           |             |             |             | D4168-041     | 350 SKIDTUBE ASSEMBLY, LH |
|             | X           |             |             | D4168-042     | 350 SKIDTUBE ASSEMBLY, RH |
|             |             | X           |             | D4168-043     | 350 SKIDTUBE ASSEMBLY, LH |
|             |             |             | X           | D4168-044     | 350 SKIDTUBE ASSEMBLY, RH |
| 1           | 1           | 1           | 1           | D2739         | WEB                       |
| 8           | 8           | 8           | 8           | D2743         | SPACER                    |
| 1           | 1           | 1           | 1           | D2744         | CAP                       |
| 8           | 8           | 8           | 8           | D2745         | BUSHING                   |
| 1           |             |             |             | D3488-041     | BLADE FITTING, LH         |
|             | 1           |             | 1           | D3488-042     | BLADE FITTING, RH         |
| 4           | 4           | 4           | 4           | D3490-1       | SPACER                    |
| 4           | 4           |             |             | D3490-3       | SPACER                    |
|             |             | 4           | 4           | D3490-5       | SPACER                    |
| 8           | 8           | 8           | 8           | D3492-041     | PLUG ASSEMBLY             |
| 8           | 8           |             |             | D3492-043     | PLUG ASSEMBLY             |
|             |             | 8           | 8           | D3492-045     | PLUG ASSEMBLY             |
| 8           | 8           | 8           | 8           | D3631-1       | WASHER                    |
| 7           | 7           | 7           | 7           | D3873-1       | BUSHING                   |
| 1           | 1           | 1           | 1           | D4154-041     | WEARPLATE ASSEMBLY        |
|             | 1           |             |             | D4168-1       | SKIDTUBE WELDMENT, LH     |
|             |             |             |             | D4168-2       | SKIDTUBE WELDMENT, RH     |
|             |             | 1           |             | D4168-3       | SKIDTUBE WELDMENT, LH     |
|             |             |             | 1           | D4168-4       | SKIDTUBE WELDMENT, RH     |
| 4           | 4           | 4           | 4           | D4170-1       | SPACER                    |
| 1           | 1           | 1           | 1           | D4171-1       | BUSHING                   |
| 4           | 4           | 4           | 4           | ALS4-1032-225 | INSERT                    |
| 4           | 4           | 4           | 4           | AN3C6A        | BOLT                      |
| 1           | 1           | 1           | 1           | AN3C34A       | BOLT                      |
| 4           | 4           | 4           | 4           | AN3C36A       | BOLT                      |
| 4           | 4           | 4           | 4           | AN6C44A       | BOLT                      |
| 1           | 1           | 1           | 1           | AN8C35A       | BOLT                      |
| 9           | 9           | 9           | 9           | AN960C10      | WASHER (OR NAS1149CO363R) |
| 4           | 4           | 4           | 4           | AN960C10L     | WASHER (OR NAS1149CO332R) |
| 1           | 1           | 1           | 1           | AN960C816L    | WASHER (OR NAS1149CO832R) |
| 5           | 5           | 5           | 5           | MS21043-3     | NUT                       |
| 4           | 4           | 4           | 4           | MS21043-6     | NUT                       |
| 1           | 1           | 1           | 1           | MS21083C8     | NUT                       |
| 4           | 4           | 4           | 4           | NAS1515H3L    | WASHER                    |

# GENERAL NOTES:

- MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2  
 A OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
 BLACK ANTI-SKID PAINT AS INDICATED TO 1.0" ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- WELD PER DART QSI 004
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
 MINIMUM YIELD TENSILE STRENGTH = 35 KSI  
 MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
 FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

FOR OFFICIAL USE ONLY  
 UNCLASSIFIED  
 EXCLUDED FROM AUTOMATIC  
 DOWNGRADING AND  
 DECLASSIFICATION  
 AUTHORITY: 25  
 DATE: 12-13-2013

10-128139 MJS  
 15-01-08

RELEASED  
 2013-08-13  
 JMD

|            |                                                                                                                              |    |          |
|------------|------------------------------------------------------------------------------------------------------------------------------|----|----------|
| B          | ADD VIEW TO CONTROL FWD BEND ORIENTATION<br>(ZN D-1-4/-5/-6/-7); UPDATED FINISH OPTIONS.<br>REASON: PAR13-276 AND NCR13-2757 | MB | 13.07.11 |
| A          | NEW ISSUE                                                                                                                    | SC | 10.08.09 |
| REV.       | DESCRIPTION                                                                                                                  | BY | DATE     |
| DESIGN     | SC                                                                                                                           |    |          |
| DRAWN      | B                                                                                                                            |    |          |
| CHECKED    | JP                                                                                                                           |    |          |
| MFG. APPR. | JP                                                                                                                           |    |          |
| APPROVED   | JP                                                                                                                           |    |          |
| DE APPR.   | JP                                                                                                                           |    |          |
| DATE       | 13.07.11                                                                                                                     |    |          |

|                                                                                                                                                                                                                                                                                            |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DART AEROSPACE USA, INC.                                                                                                                                                                                                                                                                   |               |
| KENT, WA                                                                                                                                                                                                                                                                                   |               |
| DRAWING NO.<br>D4168                                                                                                                                                                                                                                                                       | REV. B        |
| TITLE<br>350 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                             | SHEET 1 OF 11 |
| SCALE<br>NTS                                                                                                                                                                                                                                                                               |               |
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8 7 6 5 4 3 2 1

D

D

C

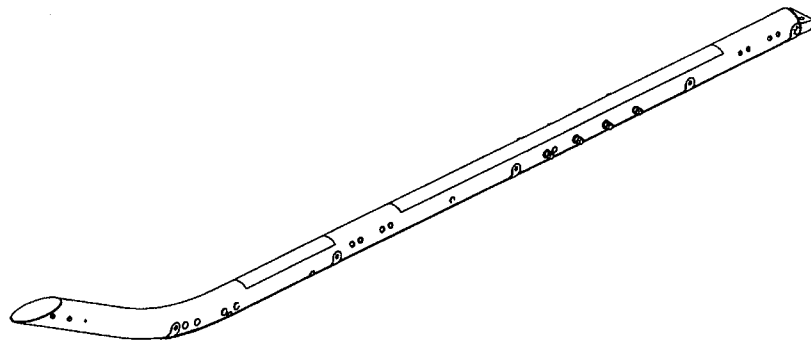
C

B

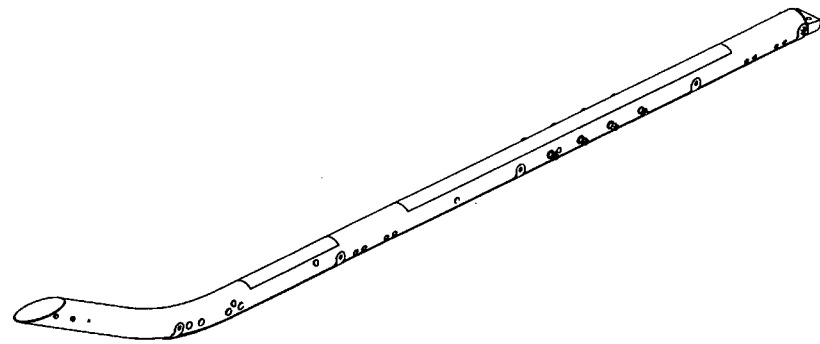
B

A

A



**D4168-041 350 SKIDTUBE ASSEMBLY, LH**

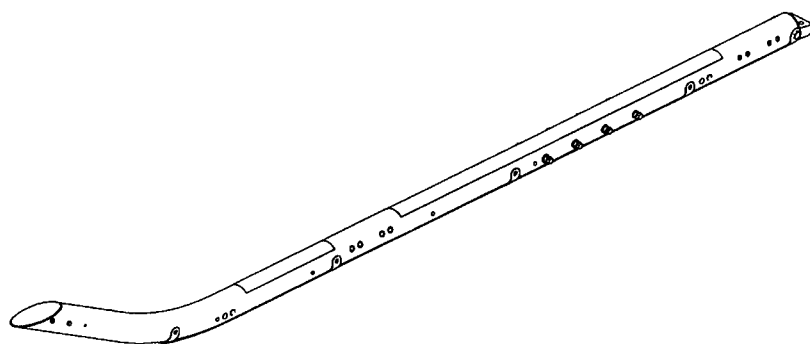


**D4168-042 350 SKIDTUBE ASSEMBLY, RH**

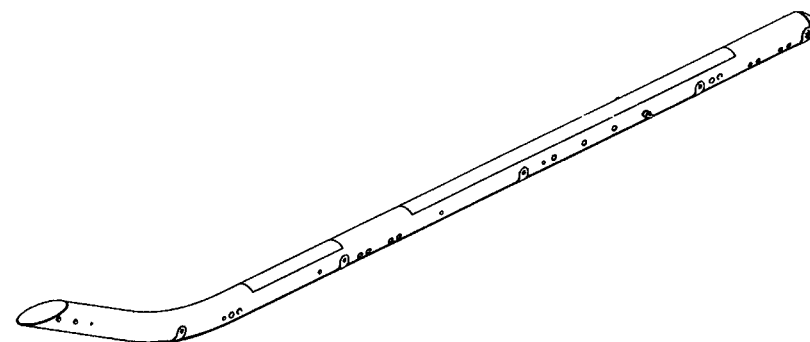
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2013-08-13  
*mm*

|            |                    |                                                                                                                                                                                                                                                                                                        |               |
|------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | SC                 | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                        |               |
| DRAWN      | <i>[Signature]</i> | KENT, WA                                                                                                                                                                                                                                                                                               |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                                                            | REV. B        |
| MFG. APPR. | <i>[Signature]</i> | D4168                                                                                                                                                                                                                                                                                                  | SHEET 2 OF 11 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                                                  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | 350 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                                  | NTS           |
| DATE       | 13.07.11           | COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.<br><small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR DISCLOSED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |               |

8 7 6 5 4 3 2 1



D4168-043 350 SKIDTUBE ASSEMBLY, LH

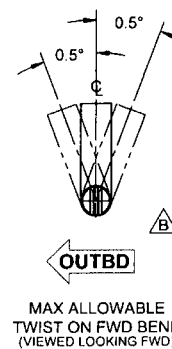
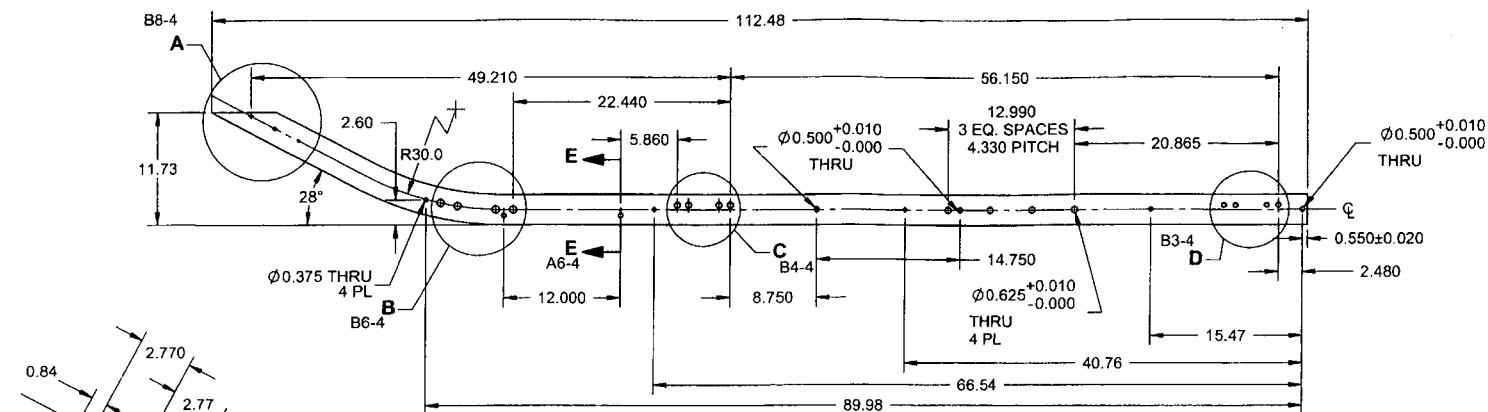


D4168-044 350 SKIDTUBE ASSEMBLY, RH

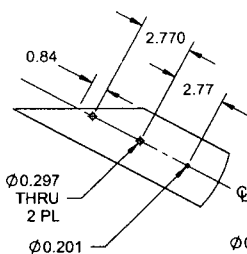
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2013-08-13  
AND

|            |          |                                                                                                                                                                                                                                                                                                       |               |
|------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | SC       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                       |               |
| DRAWN      | JB       | KENT, WA                                                                                                                                                                                                                                                                                              |               |
| CHECKED    | JP       | DRAWING NO.                                                                                                                                                                                                                                                                                           | REV. B        |
| MFG. APPR. | JP       | D4168                                                                                                                                                                                                                                                                                                 | SHEET 3 OF 11 |
| APPROVED   | JP       | TITLE                                                                                                                                                                                                                                                                                                 | SCALE         |
| DE APPR.   | JP       | 350 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                                 | NTS           |
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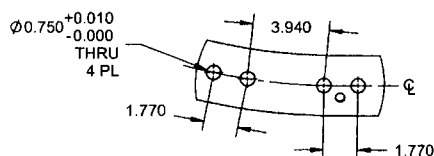
8 7 6 5 4 3 2 1



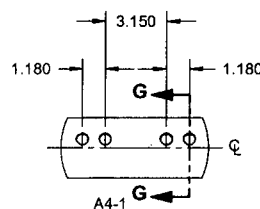
**D4168-1 LH SKIDTUBE**



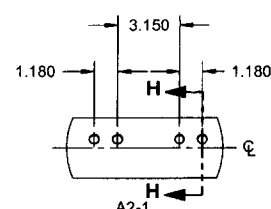
**DETAIL A**  
SCALE 2X



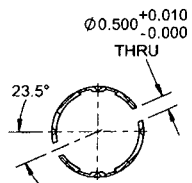
**DETAIL B**  
SCALE 2X



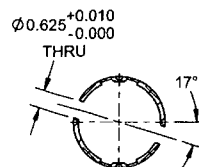
**DETAIL C**  
SCALE 2X



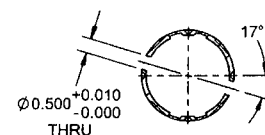
**DETAIL D**  
SCALE 2X



**SECTION E-E**  
SCALE 3X, 2 PL



**SECTION G-G**  
SCALE 3X, 4 PL



**SECTION H-H**  
SCALE 3X, 4 PL

**RELEASED**  
2013-08-13

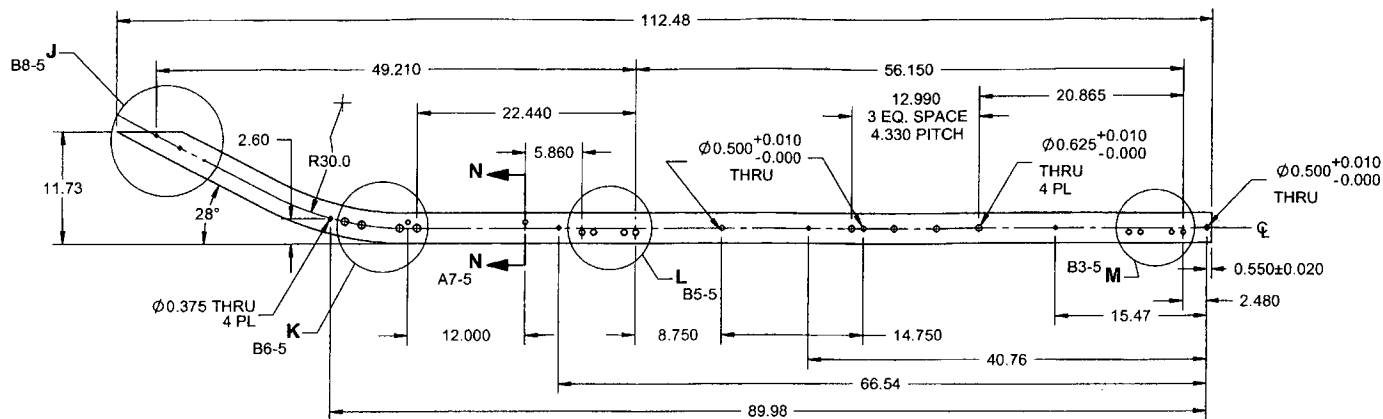
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DRAWN  
CHECKED  
MFG. APPR.  
APPROVED  
DE APPR.  
DATE 13.07.11

**DART AEROSPACE USA, INC.**  
KENT, WA

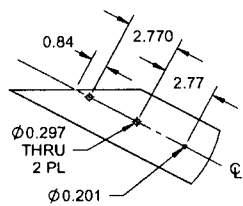
DRAWING NO. **D4168**  
TITLE **350 SKIDTUBE ASSEMBLY**  
SHEET 4 OF 11  
SCALE  
NTS

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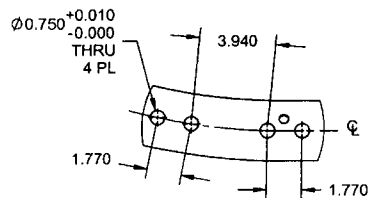
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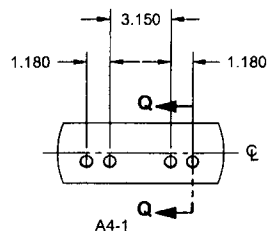
# **D4168-2 RH SKIDTUBE**



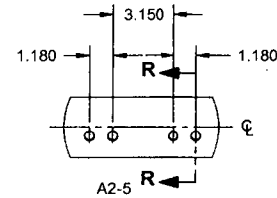
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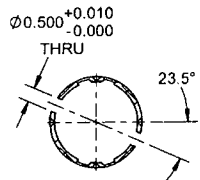
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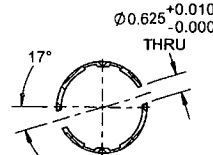
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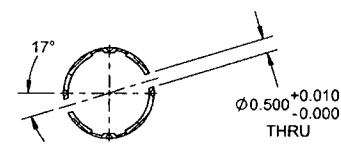
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**SECTION N-N**  
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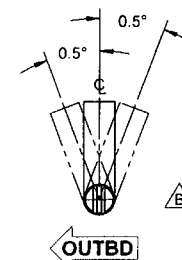
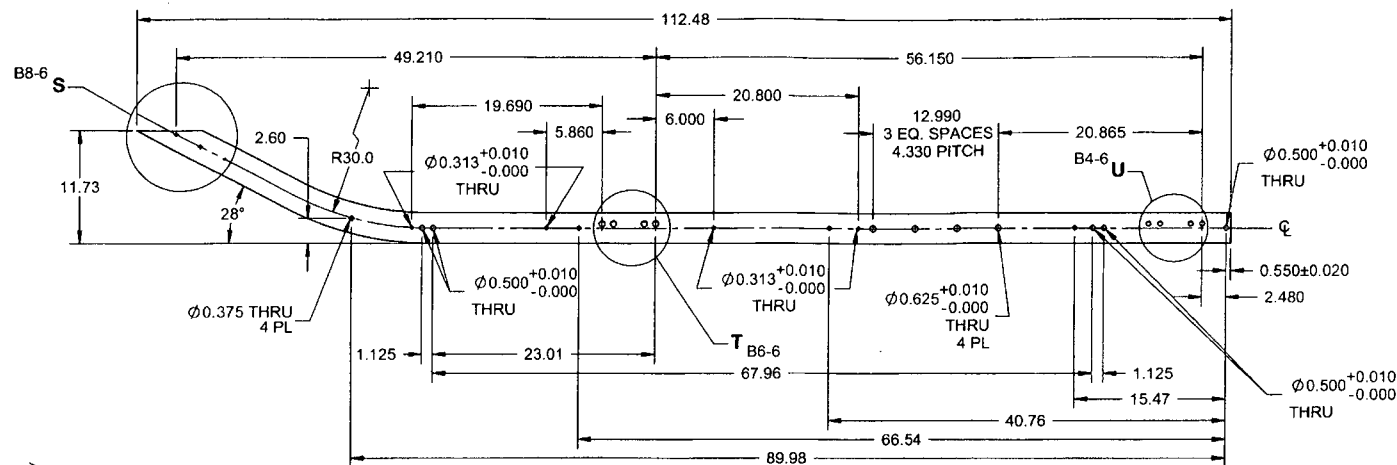
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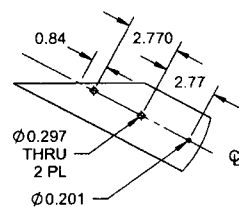
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JW

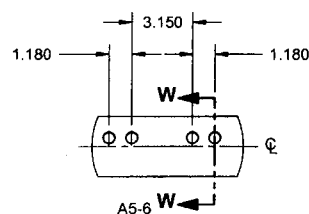
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|------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| SHEET 5 OF 11<br>SCALE<br>NTS                                                                                                      |  | REV. B<br>SHEET 5 OF 11<br>SCALE<br>NTS                                                                                                                                                                                                                                                                                                                                                                                       |



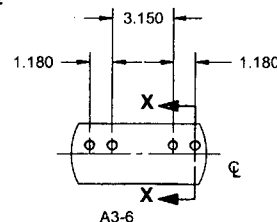
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TWIST ON FWD BEND  
(VIEWED LOOKING FWD)



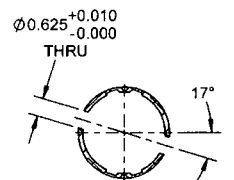
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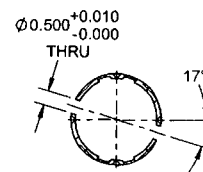
**DETAIL T**  
SCALE 2X



**DETAIL U**  
SCALE 2X



**SECTION W-W**  
SCALE 3X, 4 PL



**SECTION X-X**  
SCALE 3X, 4 PL

**RELEASED**  
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MFG. APPR.  
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DE APPR.  
DATE 13.07.11

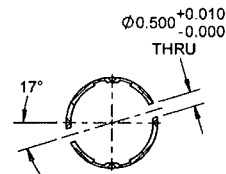
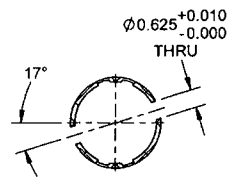
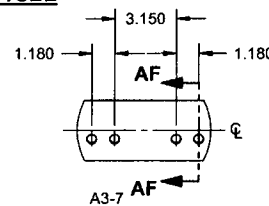
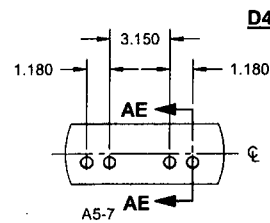
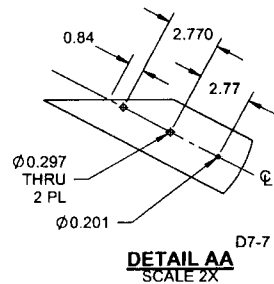
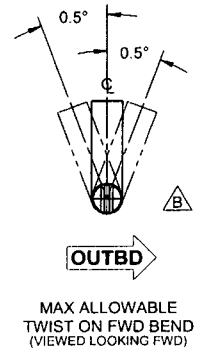
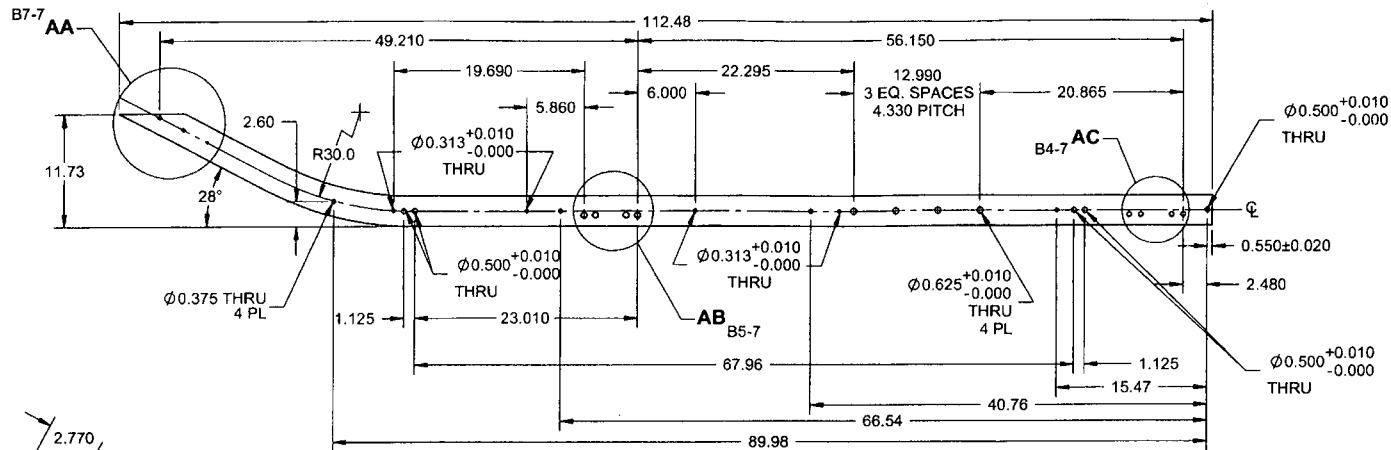
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**D4168**  
TITLE  
**350 SKIDTUBE ASSEMBLY**

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REV. B  
SHEET 6 OF 11  
SCALE  
NTS

8 7 6 5 4 3 2 1



**D4168-4 RH SKIDTUBE**

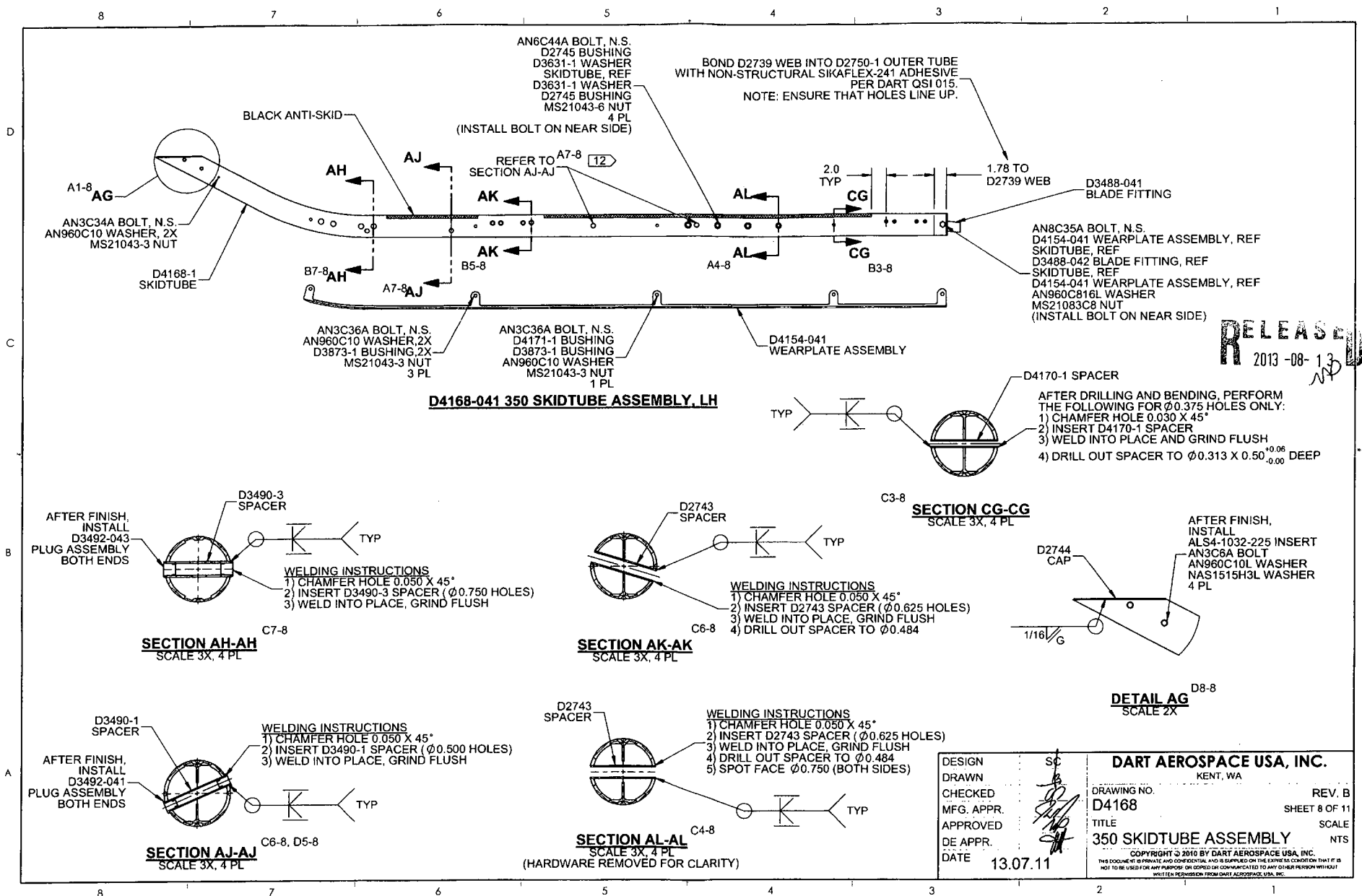
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